

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

ENTROPIC COMMUNICATIONS, LLC,

*Plaintiff,*

v.

CHARTER COMMUNICATIONS, INC.,

*Defendants.*

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CIVIL ACTION NO. 2:22-CV-00125-JRG

**REPORT AND RECOMENDATION**

Before the Court is Defendant Charter Communications, Inc. (“Charter”) Motion for Summary Judgment of Non-Infringement Of The Asserted Claims Of The ’682 and ’690 Patents (Dkt. No. 176). After consideration, the Court finds that the motion should be **DENIED**.

**I. BACKGROUND**

Entropic Communications, LLC (“Entropic”) filed its initial complaint on April 27, 2022 asserting that Charter infringes U.S. Patent Nos. 8,223,775 (the “’775 Patent”), 8,284,690 (the “’690 Patent”), 8,792,008 (the “’008 Patent”), 9,210,362 (the “’362 Patent”), 9,825,826 (the “’826 Patent”), and 10,135,682 (the “’682 Patent”) (collectively “the Asserted Patents”). (Dkt. No. 1 at ¶1.)

**II. APPLICABLE LAW**

Summary judgment should be granted “if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). Any evidence must be viewed in the light most favorable to the nonmovant. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986) (citing *Adickes v. S.H. Kress & Co.*, 398 U.S. 144,

158–59 (1970)). Summary judgment is proper when there is no genuine dispute of material fact. *Celotex v. Catrett*, 477 U.S. 317, 322 (1986). “By its very terms, this standard provides that the mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no genuine [dispute] of material fact.” *Anderson*, 477 U.S. at 247–48. The substantive law identifies the material facts, and disputes over facts that are irrelevant or unnecessary will not defeat a motion for summary judgment. *Id.* at 248. A dispute about a material fact is “genuine” when the evidence is “such that a reasonable jury could return a verdict for the nonmoving party.” *Id.*

The moving party must identify the basis for granting summary judgment and evidence demonstrating the absence of a genuine dispute of material fact. *Celotex*, 477 U.S. at 323. “If the moving party does not have the ultimate burden of persuasion at trial, the party ‘must either produce evidence negating an essential element of the nonmoving party’s claim or defense or show that the nonmoving party does not have enough evidence of an essential element to carry its ultimate burden of persuasion at trial.’” *Intellectual Ventures I LLC v. T Mobile USA, Inc.*, No. 2:17-CV-00577-JRG, 2018 WL 5809267, at \*1 (E.D. Tex. Nov. 6, 2018) (quoting *Nissan Fire & Marine Ins. Co., Ltd. v. Fritz Cos., Inc.*, 210 F.3d 1099, 1102 (9th Cir. 2000)).

### III. ANALYSIS

Before the Court in this motion are two disputes: (1) whether Charter’s implementation of its cable modem termination system (CMTS) and profile management application (PMA) infringes the ’682 patent; and (2) whether Charter’s implementation of “Upstream PMA” infringes either the ’682 or ’690 patent. For the reasons stated below the Court finds that there is a genuine question of material fact as to the first question. Therefore the motion should be **DENIED** as to the first question and **DENIED AS MOOT** as to the second question.

## A. INFRINGEMENT OF THE '682 PATENT

Charter argues two grounds as to why its CMTS does not infringe the '682 Patent: (1) the allegedly infringing actions of Charter's PMA implementation are not performed "by a cable modem termination system (CMTS);" and (2) Charter did not implement PMA "for each cable modem served by said CMTS." (Mot. at 6, 10.)

### i. "[B]y a cable modem termination system (CMTS);"

On the first ground, Charter alleges that Entropic fails to demonstrate that the "assigning," "generating," and "selecting" steps are performed by the CMTS as claimed. (Mot. at 6.) Rather, Charter argues that the PMA that Entropic points to for performing these steps is not part of the CMTS and as such, Entropic cannot meet its burden. (*Id.*).

Charter argues its PMA is separate from, and cannot be considered a part of, its CMTS. (*Id.* at 6-9.) For this notion, Charter largely points to a singular piece of hardware that has been central to Entropic's infringement analysis. For clarity the Court will refer to this hardware component as the "accused chassis." Charter argues the accused chassis is located at a central location that handles upstream and downstream communications for cable modems and may serve thousands of cable modems. (*Id.* at 6.) To facilitate this communication the accused chassis utilizes a modulation profile that may be recalculated by a PMA "using an automated process running on separate servers." (*Id.* at 7.) Charter argues the DOCSIS standard describes moving the PMA functionality out of the CMTS to "be able to deploy one PMA application solution across different CMTS platforms." (*Id.*) Charter further cites Entropic's own discussion of Charter's PMA, showing it in a figure separate from the CMTS and quotes Entropic's expert that the PMA is "used by the CMTS." (*Id.* at 8.)

Entropic concedes that it points to the PMA for many elements and that the CMTS it alleges implements the PMA is not contained in a single physical box, the accused chassis. (Opp. at 9.) Entropic contends that this is not sufficient to demonstrate the CMTS does not include the PMA. (*Id.*) Entropic argues the patent contemplates that the invention could be realized in a “distributed fashion,” including the CMTS. (*Id.*)

Entropic argues that under the plain meaning of CMTS, Charter’s PMA software “creates an enhanced CMTS.” (*Id.* at 10). Entropic points to expert testimony that Charter’s CMTSs implement other routine functions in a distributed manner. (*Id.*) Entropic argues this demonstrates that implementing a CMTS in a distributed manner is entirely common as what was done with the PMA functionalities. (*Id.* at 10-11.)

In turn, Charter contests Entropic’s claim construction argument that a CMTS may be implemented in a distributed manner. (Reply at 5.) Charter argues the discussion cited by Entropic applies to the invention, not to a CMTS. (*Id.*) Rather, Charter argues CMTS is defined by DOCSIS to be “[a] device located at the cable television system headend or distribution hub. . .” (*Id.*) Charter also contests Entropic’s contention that there is a fact issue, noting Entropic’s expert referred to the accused chassis as the CMTS and did not contest that the PMA resides separately in the cloud. (*Id.* at 6.)

The Court finds there is a genuine dispute of material fact as to this issue.

First, the Court is not convinced that claim construction is warranted here. Charter’s argument for the DOCSIS definition is not persuasive. First, DOCSIS is extrinsic evidence that Charter has not shown was adopted. Second, the DOCSIS definition conflicts with patent’s discussion that the invention may be implemented in a distributed manner.

As such, the question becomes to what extent may a distributed component or functionality be considered part of a CMTS. Working under the plain meaning of CMTS, it is clear there is a fact dispute on this point. While Charter has cited several pieces of evidence to suggest the PMA would not be considered part of the CMTS, the Court must make all assumptions in favor of the non-movant. Entropic has identified sufficient evidence to permit a jury to find in its favor on this point.

**ii. “[F]or each cable modem served by said CMTS.”**

On the second ground, claim 1 of the ’682 Patent requires “determining . . . for each cable modem served by said CMTS, a corresponding signal-to-noise ratio” and “assigning . . . each cable modem among a plurality of service groups.” Charter argues its PMA only services a subset of cable modems served by the accused chassis. (Mot. at 10.) Because Entropic identifies Charter’s PMA as performing the determining and assigning steps, at most, Charter argues, it only performs the determining and assigning steps on a subset of cable modems, not on each cable modem. (*Id.*)

Entropic argues that Charter’s motion is premised on a novel construction of “each cable modem *served* by a CMTS.” (Opp. at 12.) Entropic alleges that Charter construes “served” to mean connected to the accused chassis. (*Id.*) Entropic argues “served” is better understood in line with a distributed CMTS which Entropic proposes may be understood based on its functionalities. (*Id.*) Entropic argues under a proper construction of CMTS, that would include Charter’s PMA, only the subset of cable modems noted by Charter are “served.” (*Id.* at 13).

Charter counters its understanding of “served” is the plain and ordinary meaning. (Reply at 7.) Additionally, Charter contests Entropic’s argument that a distributed understanding of CMTS eliminates the cable modems not served with PMA functionalities. (*Id.* at 7-8.) Charter argues this

would require inappropriately splitting the accused chassis into two CMTSs, one with PMA functionality and one without. (*Id.* at 8.)

Entropic counters Charter’s final point that there is no reason why a PMA-enabled CMTS cannot coexist with a “Legacy CMTS” on the same chassis. (Sur-Reply at 6.) Rather, Entropic notes the two CMTSs utilize different software and hardware within the same accused chassis. (*Id.*)

This issue also presents a genuine question of material fact. As noted above, the Court does not find that the term CMTS should be construed as limited to the DOCSIS definition and may be distributed beyond the accused chassis. As Charter’s argument has focused on cable modems connected to or “served” by the accused chassis, there is an open question as to what cable modems are served by the accused CMTS. Entropic has presented plausible evidence that Charter utilizes multiple CMTSs, including an accused CMTS with PMA functionality that performs the determining and assigning steps of each cable modem it serves.

## **B. UPSTREAM PMA**

Charter argues based on Entropic’s expert’s discussion of Upstream PMA, and in particular that Upstream PMA can be switched on at any time, that Entropic “appears to assert that Charter’s use of ‘Upstream’ PMA infringes the ’682 patent.” (Mot. at 11.) Charter further argues based on statements that the claimed invention of the ’690 Patent is “important for Upstream PMA,” Entropic relies on Upstream PMA for its assertion of infringement. (*Id.*) Charter argues that because it never has utilized Upstream PMA, summary judgment should be granted as to non-infringement based on Upstream PMA.

Entropic does not contest that Charter has not implemented upstream PMA. (Opp. at 14.) Entropic concedes it is the law “that acts of infringement that have not occurred are not acts of

infringement.” (*Id.*) Instead, it contends such a tautology is no ground to grant summary judgment. (*Id.* at 15.) Entropic, however, notes the real question for Upstream PMA is “the expected use Charter will make of the invention over the lifetime of the hypothetical license.” (Dkt. 283 at 7.) Entropic points out, for the ’682 Patent, its discussion of Upstream PMA is based on the same infringement theory as downstream PMA and at any point in the future, Charter might implement upstream PMA in the same manner. (Opp. at 14.) Entropic thus argues the question of Upstream PMA is of the amount of infringement not the extent. (*Id.* at 14.)

It does not appear that the limited question of Charter’s past infringement via its use of Upstream PMA is an active controversy before the Court. Entropic concedes Charter has yet to implement Upstream PMA. (Opp. at 14.) As such, the Court recommends this portion of Charter’s summary judgment be **DENIED** as moot. As to Charter’s future use of Upstream PMA, the parties “may . . . consider the expected or estimated usage . . . of a given invention, assuming proof is presented to support the expectation.” *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1327 (Fed. Cir. 2009). Whether Charter will or will not deploy Upstream PMA is a matter of fact for the jury. *Micro Chem., Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1392 (Fed. Cir. 2003).

#### IV. CONCLUSION

Having considered the facts, the Court recommends that Charter’s motion be **DENIED**.

A party’s failure to file written objections to the findings, conclusions and recommendations contained in this report **by not later than December 7, 2023**, bars that party from *de novo* review by the District Judge of those findings, conclusions, and recommendations and, except on grounds of plain error, from appellate review of unobjected-to factual findings and legal conclusions accepted and adopted by the district court. FED. R. CIV. P. 72(b)(2); *see also Douglass v. United Servs. Auto. Ass’n*, 79 F.3d 1415, 1428–29 (5th Cir. 1996) (*en banc*). Any objection to this Report and Recommendation

must be filed in ECF under the event “Objection to Report and Recommendation [cv, respoth]” or it may not be considered by the District Judge.

**SIGNED this 28th day of November, 2023.**

  
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ROY S. PAYNE  
UNITED STATES MAGISTRATE JUDGE